

## **COMPANY BACKGROUND**

Premises: Warehouse – FM/P and Chemical Storage facility

Occupancy: 15 Admin Staff, including Managing Director, Head Human Resource, Fire Safety Manager

14 Warehouse Personnel, including Warehouse Manager, Shift Supervisor, Forklift Driver, Packers

2 Security Officers

Equipping:

Emergency Response Equipment: Spill Kit, Leak Sealing Kit, Hosereel and Fire Extinguishers as well as staff aids for the Field Incident Command Post. Staff aids include warehouse layout plan, inventory list, MSDS, etc.

Fire Protection System: Sprinkler, Fire Alarm, Smoke & Heat Detectors

Personnel Protective Equipment: Chemical Protective Suit, Self-Contained Breathing Apparatus (SCBA), Gas Detectors,

## **WORST CREDIBLE SCENARIO**

Time & Day: Approximately 0900hrs, Monday

In the FM area storage on 13 Jul 2010 @ 1000h, a forklift operator over steered and hit through a pallet carrying 4x200L drums of Acetone. As a result, a drum fell onto the ground and acetone was seen leaking from it. The forklift operator panicked and rammed into an iso tanker nearby. The iso tanker containing 2000L of Iso Propanol ruptured and a small fire occurred. 3 workers were also injured as a result of the incident.

## SOLUTIONS

### CERT STRUCTURE

- SMC (x1) – Managing Director
- SIC (x1) – Shift Supervisor
- ERT (x4) – Forklift Drivers (Spill Team)
- ERT (x 2) – Packers (Fire Fighting Team)
- FA (x2) – Other Warehouse Personnel
- Evacuation IC (x1) – FSM, assisted by Fire Wardens
- Traffic Controller (x2) – Security Guard / Traffic Wardens

### 6 CORE ACTIVITIES

Activities	Details	Sequence of Actions	Time Sequence
1	<b>Activation and response</b>	Workers working near the incident site shall immediately raise alarm and inform the Security Guard at the Guard Post.	<b>H Hour</b>
		On receiving call on the fire, the Security Guard shall confirm the exact location with the informer	<b>H – H + 30 secs</b>
		Security Guard shall contact the SIC through walkie-talkie (or any Comm Device) to mobilize CERT members to the incident site	
		CERT shall gather at CERT Assembly Area	<b>H – H + 1 mins</b>
2	<b>Incident size-up</b>	SIC shall assess the situation with appropriate PPE and report to SMC.	<b>H – H + 5 mins</b>
		SIC shall instruct the ERT to don the necessary PPE and deploy them to the incident site with the response equipment.	
		SIC shall instruct the termination of all warehouse and loading and unloading operations.	
3	<b>Fire-fighting and mitigating operations</b>	ERT (FF) conduct snatch rescue with protection jet and utilize the fire extinguishers to attempt to extinguish the fire.	<b>H – H + 8 mins</b>
		SIC shall direct efforts to mitigate spill and conduct search and rescue operations, ensure the safety of all the ERT members throughout the operations.	

		SIC shall setup the Field Incident Command Post and assign the first-aid team to setup the First Aid Post.	
		SIC shall set up the various hazard zonings.	<b>H – H + 12 mins</b>
		SIC shall maintain constant communications with the ERT and update the situations to the SMC and Control Room regularly	
		SIC shall ensure that all personnel, casualties and equipment brought out of the hot zone be properly decontaminated.	<b>Updated whenever changes occur or workstation set up</b>
		Security personnel or traffic wardens shall be deployed to prevent unauthorized access to the incident site and lead SCDF appliances to incident site	<b>H – H + 15 mins</b>
<b>4</b>	<b>Support Activities</b>	Security personnel or traffic wardens shall be deployed to prevent unauthorized access to the incident site and lead SCDF appliances to incident site	<b>H – H + 5 mins</b>
		Fire wardens shall conduct evacuation of admin staff and support staff to the Evacuees Assembly Area and account for personnel.	<b>H – H + 10 mins</b>
		First aiders shall set up the FAP and administer medical treatment to the evacuated casualties.	<b>H – H + 15 mins</b>
<b>5</b>	<b>Linking up with SCDF upon arrival</b>	SIC shall hand over command to SCDF upon arrival, give an update on the situation, operations conducted, CERT deployment, casualty and evacuation status and handover the necessary documents (e.g. Layout Plan, MSDS, inventory list, etc.)	<b>H – H + 20 mins</b>
<b>6</b>	<b>Ongoing operations and recovery</b>	SIC shall continue to support fire fighting operations such as hose relay, manning of protection jets, first aid and casualty evacuation.	<b>H – End of Ops</b>
		SIC shall conduct proper recovery of the personnel and equipment and clean up the incident site after the end of operation.	<b>Recovery</b>